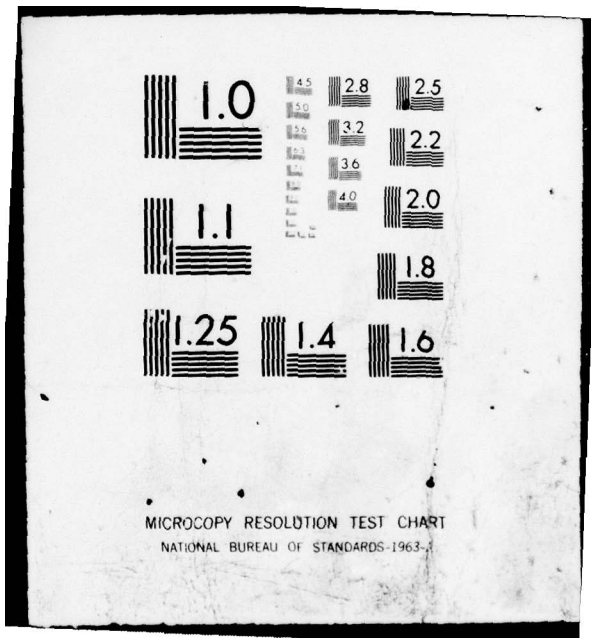
AD-A081 229 AMERICAN INST FOR RESEARCH WASHINGTON DC F/G 5/9
DUTY MODULE RELATIONSHIP TO TRAINING AND EXPERIENCE REQUIREMENT--ETC(U)
FEB 75 A L KOROTKIN, W P DAVIS DAHC19-74-C-0048
UNCLASSIFIED AIR-45500 ARI-RN-79-37 NL

END
DATE FILMED
3-80
DDC


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Research Note 79-37

LEVEL II

DUTY MODULE RELATIONSHIP TO TRAINING AND EXPERIENCE REQUIREMENTS IN CAREER DEVELOPMENT AND ALTERNATE SPECIALTY SELECTIONS

Arthur L. Korotkin,
Warren P. Davis
American Institutes for Research

LEADERSHIP AND MANAGEMENT TECHNICAL AREA

U. S. Army
Research Institute for the Behavioral and Social Sciences

February 1975

Approved for public release; distribution unlimited.

(reprinted December 1979)

U. S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency under the Jurisdiction of the Deputy Chief of Staff for Personnel

JOSEPH ZEIDNER
Technical Director

FRANKLIN A. HART
Colonel, US Army
Commander

Research accomplished
for the Department of the Army

American Institutes for Research

NOTICES

DISTRIBUTION: Primary distribution of this report has been made by ARI. Please address correspondence concerning distribution of reports to: U. S. Army Research Institute for the Behavioral and Social Sciences, ATTN: PERI-TP, 5001 Eisenhower Avenue, Alexandria, Virginia 22333.

FINAL DISPOSITION: This report may be destroyed when it is no longer needed. Please do not return it to the U. S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER Research Note 79-37	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) DUTY MODULE RELATIONSHIP TO TRAINING AND EXPERTENCE REQUIREMENTS IN CAREER DEVELOPMENT AND ALTERNATE SPECIALTY SELECTIONS		5. TYPE OF REPORT & PERIOD COVERED Final Technical Report 6. PERFORMING ORG. REPORT NUMBER AIR-45500
7. AUTHOR(s) Arthur L. Korotkin, Warren P. Davis		8. CONTRACT OR GRANT NUMBER(s) DAHC19-74-C-0048
9. PERFORMING ORGANIZATION NAME AND ADDRESS American Institutes for Research 1055 Thomas Jefferson St., NW Washington, DC 20007		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 2Q162107A712
11. CONTROLLING OFFICE NAME AND ADDRESS Army Research Institute for the Behavioral and Social Sciences 5001 Eisenhower Avenue, Alexandria, VA 22333		12. REPORT DATE Feb 75 13. NUMBER OF PAGES 30
14. MONITORING AGENCY NAME & ADDRESS (If different from Controlling Office) 12 55 023450		15. SECURITY CLASS. (of this report) Unclassified 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited 18 ARI

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

19 RN-79-37

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Officer Personnel Management System (OPMS), Job Content Description, Duty Modules, Skill Transferability between OPMS Specialties, Alternate Specialty Selection

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Representative duty module coverage was developed in each of 46 different OPMS specialties. A matrix was developed reflecting 174 duty modules over 47 specialties in order to show skill similarity. A survey involving 440 respondents was administered to gather data regarding specialty training.

Office of Personnel Management System

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

Unclassified 023450

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

A complete set of Duty Module and Job Description material assembled by the Army Research Institute for the Behavioral and Social Sciences (ARI) to support a number of R&D efforts consists of the following nine volumes:

1. Army Officer Duty Module Manual. ARI Research Note 79-31, October 1975.

2. Duty Module Methodology for Officer Career Management System Development: Catalogue of Army Officer Duty Modules. ARI Research Note 79-32, October 1975.

3. Duty Module Methodology for Officer Career Management System Development: Task Data Bank Index. ARI Research Note 79-33, November 1975.

4. Duty Module Methodology for Officer Career Management System Development: Task Data Bank, Task List. ARI Research Note 79-34, October 1975.

5. Results of Field Survey to Evaluate an Experimental Set of Officer Duty Modules. ARI Research Note 79-35, January 1974.

6. Development of Criteria Dimensions for Evaluation of Performance and Career Development of Entry-Level Officers, ARI Research Note 79-36, November 1974.

7. Duty Module Relationship to Training and Experience Requirements in Career Development and Alternate Specialty Selections. ARI Research Note 79-37, February 1975.

8. Design and Validation of Additional Duty Modules for Engineer and Ordnance Officer Positions, ARI Research Note 79-38, February 1975.

9. Duty Module Methodology for Officer Career Management System Development, ARI Research Note 79-39, January 1976.

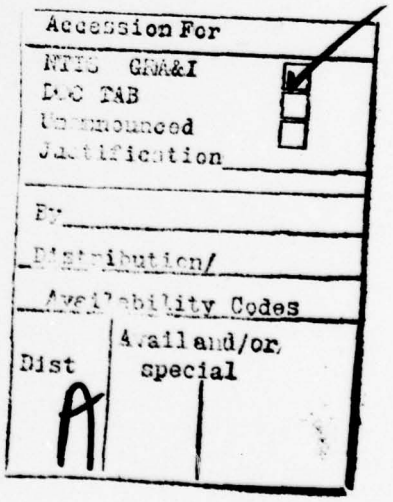
The set of duty modules and job descriptions contained in these nine volumes was developed by the American Institutes for Research (AIR) to meet a requirement for job information in an ARI research contract being executed by Educational Testing Service (ETS). This contract was part of the ARI research program on Career Progression (Information) Systems. These duty modules, developed for use in a career information system, have proved to be highly valuable for meeting a number of other research and developmental objectives.

The duty module concept evolved from interactions between the American Institutes for Research (AIR) and U. S. Army Research Institute for the Behavioral and Social Sciences (ARI). These interactions emerged from the AIR "Taxonomy" contract which was originally initiated and supported

by the Defense Advanced Research Projects Agency (DARPA). At the time monitorship of that contract was transferred from Air Force to Army, ARI was given the responsibility for redirecting the effort from an emphasis on experimental psychology principles to the field of personnel psychology. ARI proposed the development of a job taxonomy, based on a component of a duty position assignable to a single individual. This component could be considered as a building block for job re-engineering, useful for constructing TDA's or TO&E's, for tracking career progression of individuals, and for providing career information to Army personnel. It was hoped that such a job component would provide a common language as a basis for combining manpower requirements and resources, with the integration of training and career progression, into a single self-consistent operating system. AIR, continuing under contract supervision by ARI, developed this concept further and began referring to these job components as duty modules.

The reader is particularly urged to note that these duty modules were not specifically developed for use in developing or evaluating either school programs of instruction (POI) or the achievement of OJT objectives.

Current ARI research efforts are modifying and evaluating the duty module concept in order to provide a job component measure that is appropriate for use as a data element of a Training Information Feedback System (TIFS). The final form of this data element will reflect a greater concern for criticality of tasks and for the feasibility of defining criterion referenced standards corresponding to these tasks.



A. INTRODUCTION

The Army Research Institute for the Behavioral and Social Sciences (ARI) is conducting research to identify the qualitative personnel requirements of the Officer Corps in order to define an officer career progression system in support of the Officer Personnel Management System (OPMS). Sponsors for the research are the Chief, Research and Development, and the Deputy Chief of Staff, Personnel (DCSPER) of the Department of the Army. The research is designed to aid the Army and the individual officer in making career management decisions such as primary and alternate specialty designation, assignment, military and civilian education, and selection for promotion within OPMS. Specific objectives are:

- To develop a model career progression lattice, based on officer MOS, duty module, and skills analysis, delineating within-branch and cross-branch career development patterns leading to O-6 positions in the career progression programs of the OPMS.
- To relate experience and training requirements of the individual officer to the differential career assignment options identified through the development of the model career progression lattice.
- To develop and apply measures of interests, aptitudes, motivation, and performance for evaluation of the differential potential of the individual officer, and to relate these to the differential requirement of assignments, second specialty choice, training, and promotion.

Technical advisory services were made available to the OPMS Task Group, in order to provide them with details of current developments and interim results of present research which are relevant to the new OPMS and the revision of the Army officer education system. The following sections summarize the various products of this research support.

The first of the research objectives, outlined above, is the development of an approach for describing jobs which more adequately defines the assignments in the Army officer force structure. A system is needed for describing and classifying jobs at a descriptive level which is detailed enough to provide the required information for career management purposes without being cumbersome and complicated to use. In addition, such a

system would provide a common language useful both in defining job requirements and personnel resources to fulfill these requirements. While such a system would have general applicability to the world of work, it is extremely important to the Army since its size, composition, deployment and hardware are continually changing, necessitating constant adjustments in the training and utilization of personnel resources.

- Job descriptions currently available are not standardized and vary in level of detail from gross overall representations of the job to highly detailed descriptions of task elements comprising the job. The task elements involved tend to be too numerous and vary in their level of detail across the spectrum of jobs. At the other end of the scale, descriptions provided in the Military Occupational Specialty (MOS) system are quite general, providing only information for selection, assignment, training (other than with regard to a specific MOS), and the establishment of manning requirements.

The current effort has its roots in the extensive earlier work by the American Institutes for Research(AIR) project entitled "The Development of a *Taxonomy of Human Performance.*" This program sponsored by the Advanced Research Projects Agency (ARPA) of the Department of Defense, was concerned with the development and evaluation of systems of classifying tasks which would allow better prediction about human performance capabilities. Such systems could facilitate the utilization of human performance data in decisions in such important areas as hardware design and personnel selection, assignment, and training.

As the "Taxonomy" project progressed, two major shifts in emphasis occurred. First, it became apparent that "the taxonomy"--one which was universally applicable to many kinds of human performance problems--was an overly ambitious, if not impossible, goal to achieve. The review of other taxonomic attempts and synthesis of existing data suggested that several taxonomies may be required to effectively deal with the various kinds of possible application.

The second shift(which coincided with a change in sponsors from ARPA to ARI) was a major redirection of the project. Its orientation shifted away from basic research and toward application to solving some of the

real and current problems being faced by the Army. The specific related needs of the Army (particularly those identified by the introduction of OPMS) were reviewed to determine what immediate application could be made of one or more of the theoretical models already developed. A decision was made to attempt to apply the current knowledge gained from the task taxonomy project to the development of a technique (classification system) for representing Army jobs which would facilitate career management planning. Thus, from a very broad beginning, the project became increasingly better defined and the goals more specific to particular Army needs.

This refocus of the taxonomy project was neither accidental nor arbitrary. The technical staffs of both AIR and ARI had for some time been independently examining new techniques for planning for future manpower requirements as well as improved methods of describing personnel resources to meet these requirements. The objectives of the current research program were gradually defined as the development and evaluation of an improved procedure for describing jobs which could be applicable across the spectrum of activities involved in manpower planning--to include selection, training, utilization, and performance appraisals.

B. THE DUTY MODULE CONCEPT

Although it was generally agreed that a new level of job description was necessary in order to be of use to both those dealing with resources and those dealing with requirements, the question still to be resolved was exactly how this generally useful "duty element" was to be designed.

Based on synthesis of available data, an approach to structuring the description of work activities evolved in which the following design criteria were applied: (a) the duty element must be meaningful and useful to requirement planners; (b) the duty element must be compatible with assignment practices in the field; and (c) the duty element must remain essentially the same even though the requirement may exist in a variety of assignments within the organization. It should be noted that if these criteria were met the duty element became meaningful to those concerned with training, the identification of assignments in which the duty element is a requirement, the identification of the level of training required, and the development of Programs of Instruction (POIs). The task cluster that resulted from the application of these design criteria were intended

to be self-contained, independent units of work, that would be modular in the sense that they could be used as "plug-in" units to a variety of different occupational specialties. They were named "Duty Modules."

The current procedure used for developing Duty Modules is a pragmatic one. It was shaped to a great extent by the means and resources which are available, convenient, and expeditious. First detailed job information is gathered on those positions deemed most important and representative by career managers in the Officer Personnel Directorate and which reflect the total (O-1 to O-6) grade spectrum. This job information is collected by a highly sophisticated group of senior Army Officers (retired) who have been trained as occupational analysts. The analysts then reduce the job data into task statements, and judgmentally cluster these statements into tentative Duty Modules ("Job Modules"). This clustering is guided by a set of the modules. Some of the more salient of these criteria are:

1. To be valid, the Duty Modules for any given position must be accurate and sufficient in describing the essential, truly significant, continuing work activity requirements of the position.

2. To be modular and useful, Duty Modules should be standardized, so as to apply in common across a number and variety of different positions and occupational specialties insofar as those positions actually have task clusters in common.

3. Each Duty Module should be a self-contained functional entity. It must not encompass, overlap, or depend on another Duty Module assigned to the same position.

4. A Duty Module should represent a distinctive, coherent, important part of the position. It may be important in terms either of criticality or proportion of time spent on it.

The Duty Modules are then validated (field verified) by subjecting them to review and critique by an independent sample of assignment incumbents. They are revised as necessary on the basis of these field verification data and added to the "Duty Module Catalogue." (The Duty Module Catalogue is included as Appendix A.)

Figure 1 is an example of an actual Duty Module (O-D-1) from the "Operations and Plans (Staff)" grouping. It shows the level of task

detail available in defining a Duty Module. In addition, as can be seen from the format (see Figure 1), when the module is identified within the requirements of a specific assignment, data are obtained on the level at which the incumbent performs the task, the percent of time spent on the Module, and the relative criticality of the Module to the entire job. The latter two are done for both combat and garrison conditions.

C. RESULTS

Appendix B summarizes in abstract form the research programs, completed and underway, which support the career management requirements of the Officer Personnel Management System. Reports produced under these efforts are referenced. Highlights of this research, and results relevant to the OPMS Task Group objectives are summarized below:

1. The Duty Module structure has been completely developed and field verified for the Infantry, Quartermaster, Engineer and Ordnance career branches.

2. Duty Modules requirements for significant grade and pertinent assignments in the Infantry and Quartermaster branches have been assembled and forwarded through the OPMS Task Group to the Infantry and Quartermaster schools for basic and advanced course staff review and evaluation for utility in POI development. Similar materials are being prepared for the Engineer and Ordnance branches for forwarding to their respective schools.

3. Selected job surveys have been conducted for a representative sampling (defined by OPD personnel) of assignments in the remainder of the OPMS specialties and additional Duty Modules developed as required; i.e., those needed to describe duties not defined by those Duty Modules already in the catalog. These preliminary "Job Modules" are listed in the last page of Appendix A. They must be regarded as tentative until validated through field verification.

4. A matrix has been prepared showing the appropriateness of each Duty Module to each of the OPMS specialties. It shows which clusters of tasks (Duty Modules) are common to all OPMS Specialties and those that are unique to one specialty or a small number of specialties. Such a matrix is of value in analyzing officer training and in making

Identification No. _____

Code: 04-01

DUTY MODULE O-D-1 Performs operations staff functions in a general staff or other coordinating staff	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
a Advise superior and others concerning operations matters.						
b. Prepare policy directives and SOP.						
c. Prepare and publish operation estimates and orders.						
d. Monitor execution of operations plans and orders and make changes as situation warrants.						
e. Recommend task organization, missions, and areas of operation.						
f. Organize and operate tactical operation center or operations element of command post.						
g. Determine operational readiness requirements and readiness status of unit.						
h. Recommend allocation of and authority for use of critical command resources such as replacements, special ammunition and aircraft.						
i. Coordinate overall security of command.						
j. Conduct or arrange operational unit readiness inspections and tests and take action to deal with problems.						
k. Prepare studies, reports, records, and correspondence pertaining to operations.						
l. Prepare and present operations briefings.						

	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks
1. DO MODULE AND TASKS APPLY TO YOUR POSITION:					
a. In actual or simulated combat operations and support?					
b. In garrison and other than a?					

	(0) Not applicable	(1) 1–9%	(2) 10–29%	(3) 30–49%	(4) 50–69%	(5) 70–89%	(6) 90–100%
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:							
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB:					
a. In actual or simulated combat operations and support?					
b. In garrison and other than a?					

determinations as to what type of training should be provided. It would also have impact on alternate specialty selection by showing the relationships among the 47 Specialties. It should be emphasized, of course, that the OPMS Specialty by Duty Module Matrix is not complete since not all of the jobs in the Army have been analyzed and not all of the Duty Modules have been fully verified. A section of the matrix is shown in Figure 2 for illustrative purposes.

5. A quantitative measure of Duty Module commality across positions and specialties has been developed. Called the Index of Commonality it can be used to represent, with a single number the ratio of Common Modules to total Modules within a pair of specialties or positions. The formula for index is shown below.

$$\text{Index of Commonality} = \frac{\text{No. of Common Modules}}{\text{No. of Common Modules} + (\text{No. of Unique}_1 + \text{No. of Unique}$$

The index is in its initial stages of development and is currently being refined conceptually and statistically.

In addition to the above, two other efforts were undertaken which relate to the broad objectives of the OPMS Task Group.

1. A set of tentative job performance dimensions have been developed from Duty Modules. These dimensions were applied to making the performance evaluation process more objective and precise. The nine job performance dimensions derived are appropriate for all entry level jobs in the primary specialties since each is fully supported by similar duty modules across the specialties. In addition to their suitability for performance evaluation, such job performance dimensions may also be a worthwhile means of stating training objectives.

2. A questionnaire was sent to "experts" in each of the 47 OPMS Specialties. (The "experts" were identified for TRADOC by OPD, MILPERCEN). Originally the lists provided 10 names for specialty, but due to personnel turnover only a total of 440 names were useable rather than the intended 470. Of the 440 sent, 307 had replied by 1 February 1975 and were included in the subsequent analysis. A summary of the more important results is included as Appendix C.

As a result of the efforts to date a total of 345 Job Schedules (Field job analyses and identification of selected job dimensions) have

	AIR DEF ARTY	ARMOR	FIELD ARTY	INFANTRY	AUDIO-VISUAL INSTRUCT TE	COMBAT COMMUN. ELECT.	COMMUNICATIONS-EE	FIXED TELECOM. SYSTEM	COUNTERINTELLIGENCE HUMI	CRYPTOLOGY
A-1	X	X	X	X		X		X	X	X
A-2	X	X	X	X	X	X	X	X	X	X
A-3	X	X	X	X		X		X	X	X
A-4	X	X	X	X		X		X		
A-5	X	X	X	X	X	X	X	X	X	X
A-6	X	X	X	X						
A-7	X	X	X	X		X		X	X	X
A-8	X	X	X	X		X				
A-9	X	X	X	X						
A-10	X	X	X	X		X		X	X	X
A-11	X	X	X	X		X		X	X	X
B-1	X	X	X	X						
B-2										
B-3										
B-4	X	X	X	X		X	X	X	X	X
B-5										
C-1										
C-2										X
C-3										
C-4										
C-5										
C-6										
C-7									X	
C-8										
C-9										
D-1	X	X	X	X						
D-2	X	X	X	X						
D-3		X	X	X						
D-4			X							
D-5										
D-6	X	X	X	X						

Figure 2. A section of the Specialty X Duty Module Matrix

been completed. They represent, with varying degrees of coverage, the 47 OPMS Specialties. Grades have ranged from 01 to grade 06, with greatest coverage from 02 to 05. The selections of positions and incumbents were made with the assistance of the Career Branches of the Officer Personnel Directorate and covered most MOSs for troop assignments and all levels of staff assignments. In addition, thus far, 174 Duty Modules have been developed and most of them field tested in positions included in both TOE and TDA units ranging from platoon level to Hq. Dept. of Army Staff level (see Appendix A).

D. IMPLICATIONS

The Matrix and Index of Commonality discussed above are of particular relevance to the OPMS career development effort. Presented in Table 1 are some examples of commonality indices for selected pairs of OPMS specialties. The utility of the data in Table I is illustrated by a more detailed expansion and discussion of the relationships between two specialties; e.g., Infantry and Law Enforcement (from Table I).

Example of Duty Module Commonality

The Infantry Specialty contains 42 Modules and the Law Enforcement 25; of these, 22 Modules appeared in both. This gave them an Index of Commonality of .49. However, it should be noted that in going from Infantry to Law Enforcement, while there are 22 common modules, there are only three modules unique to Law Enforcement (not in Infantry). They are listed below:

1. cc-1 Performs Provost Marshal staff function for an installation or command.
2. cc-2 Controls and participates in MP operation non-combat.
3. cc-4 Directed and operates a military confinement facility.

There are 20 Modules unique to Infantry. They are listed below:

1. A-7 Performs special staff administration functions.
2. A-9 Performs executive staff secretariat functions.
3. B-1 Performs manpower management staff functions.
4. D-1 Performs operating staff functions in a general staff.
5. D-2 Performs operations planning staff functions in a general staff or other coordinating staff.
6. D-3 Performs air support staff functions in a general staff.

TABLE I

Indices of Commonality for Selected Pairs of OPMS Specialties*

Specialty	No. Unique Modules	Specialty	No. Unique Modules	No. Common Modules	Index
Infantry	26	Pers. Mgt.	2	16	.36
Maint. Mgt.	6	Gen. Troop Spt & Mat Mgt.	12	23	.56
Counterintell/HUMINT	1	Infantry	27	15	.35
Law Enforcement	20	R&D	4	5	.17
Armament Mat Mgt.	25	R&D	3	6	.18
Engineer	48	R&D	3	6	.11
Opns & Force Dev.	3	Tank & Ground Mob. Mat Mgt.	27	4	.12
Opns & Force Dev.	1	Engineer	48	6	.11
Opns & Force Dev.	1	Field Arty	34	6	.15
Procurement	4	Law Enforcement	17	8	.28
Procurement	4	Infantry	34	8	.17
Procurement	5	Finance	2	7	.50
Finance	6	Comptroller	6	3	.20
Infantry	20	Law Enforcement	3	22	.49

*CAUTION: These data are for illustrative purposes only since Duty Modules have not yet been completely developed for all of the OPMS Specialties.

7. D-6 Directs school troops operations of a combat.
8. J-2, J-3, J-5 Pilots fixed and/or a rotary wing aircraft.
9. U-4 Directs and controls redeye type air defense weapons.
10. U-1 Directs and controls tactical employment of combat maneuver unit.
11. U-2 Directs and controls Infantry mortars.
12. U-3 Directs and controls tactical employment of reconnaissance and secret units.
13. U-5 Directs and controls anti-tank weapons.
14. W-2 Directs and leads Honor Guard unit.
15. W-3 Performs staff and coordinating functions pertaining to formal ceremonies.
16. W-4 Performs unit liaison activities.
17. W-5 Performs formal investigative staff functions.
18. X-2 Participates in airborne operations as a participant.
19. X-1 Participates individually and directly in ground combat.
20. J-1 Performs special staff functions pertaining to aviators.

From the above, a general hypothesis could be formulated as a basis for future detailed analysis:

"A senior Infantry officer, experienced in Infantry command and staff assignments could function well in the Law Enforcement specialty." It may be likely that the duties involved in both modules cc-1 and cc-2 may be learned as a part of on-the-job training and through familiarity with Law Enforcement activities at previous stations where the Infantry officer had served. Duty Module cc-4, however, includes tasks regarding rehabilitation and counseling. Since rehabilitation is a primary goal of military confinement, this type of work requires special training, probably in a civilian college, plus on-the-job training as a junior officer.

It can be seen that the breadth of knowledge, experience, and duties of an Infantry officer are notably different than a Law Enforcement specialty officer. It would appear that extensive additional training and experience would be necessary for a Law Enforcement specialist to

function successfully in the breadth of Infantry assignments. The above analysis appears to fully support the OPMS mandate that denies Infantry specialty to officers that are not Infantry Branch.

Further research, using job analysis as a basis, may well result in a different designation of specialties since the primary skills of administration and management are reflected almost equally in all areas and are therefore common skills and knowledges. What may be revealed is that the differences in knowledge among certain specialties are not significant enough, particularly at senior levels, to merit separation as is currently reflected in DA Pamphlet 600-3.

E. PROJECTIONS

Future development and experimental application of the Duty Module concept needs to be accomplished. The next steps include the application of Duty Modules to:

1. Completion of the Duty Module Catalogue and development of an integrated and easily accessed data base of task and Duty Module information. This will involve the preparation of job schedules for all of the U.S. Army jobs not yet analyzed and the development and verification of additional Duty Modules as required.

2. Refinement of the tools and techniques for the development, analysis and application of Duty Modules. This includes demonstration and feasibility studies on:

a. The clarification of relationships between an individual's experience and training and his further assignment training and promotion alternatives.

b. The identification of training requirements and the identification of the most effective methods for fulfilling these requirements.

c. The facilitation of Second Specialty selection and development.

d. The specification of manning requirements and manpower forecasts.

e. The evaluation of both individual and unit performance.

3. The integration of methodology and results into a systematic program for application throughout the Army.

CATALOGUE LIST OF ARMY OFFICER DUTY MODULES
(BY AREA)

A. COMMAND MANAGEMENT, GENERAL MANAGEMENT, AND ADMINISTRATION

O-A-1 Performs unit administration
O-A-2 Performs general administration
O-A-3 Exercises military command authority
O-A-4 Performs command or general management
O-A-5 Supervises a staff section, detachment or office
O-A-6 Performs headquarters management staff functions
O-A-7 Performs special staff administrative and adjutant type functions
O-A-8 Directs, coordinates and supervises a staff
O-A-9 Performs executive staff secretariat functions
O-A-10 Counsels and evaluates subordinates as troop leader and takes action on personal problems
O-A-11 Supervises troop appearance and care and maintenance of materiel and facilities in unit

B. PERSONNEL

O-B-1 Performs manpower management staff functions
O-B-2 Performs personnel management staff functions
O-B-3 Performs staff functions pertaining to personnel services
O-B-4 Performs officer personnel management functions at departmental level
O-B-5 Directs or coordinates postal services for an installation or command

C. INTELLIGENCE

O-C-1 Performs combat intelligence staff functions
O-C-2 Performs counterintelligence and security staff functions in a general staff or coordinating staff
O-C-3 Performs foreign area strategic intelligence staff functions
O-C-4 Performs attache type intelligence functions
O-C-5 Performs aerial surveillance staff functions in a general staff or other coordinating staff
O-C-6 Performs intelligence staff functions concerning reconnaissance and surveillance (except special tactical air support functions)
O-C-7 Directs and conducts operations of counterintelligence unit
O-C-8 Conducts military intelligence collection operations in the field
O-C-9 Provides "Aggressor" support and other specialized military intelligence support for training activities

D. OPERATIONS AND PLANS (STAFF)

O-D-1 Performs operations staff functions in a General Staff or other coordinating staff
O-D-2 Performs operations planning staff functions in a General Staff or other coordinating staff
O-D-3 Performs air support staff functions in a General Staff or other coordinating staff
O-D-4 Coordinates fire support for unit tactical operations

O-D-5 Performs staff functions in preparations for, and partial or temporary operation of, a high level emergency operations facility
O-D-6 Directs school troop operations of combat arms unit(s) at a service school center

E. ORGANIZATION, TRAINING

O-E-1 Trains troops and/or civilian employees in units and activities
O-E-2 Performs training staff functions
O-E-3 Performs organization staff functions in general staff or other coordinating staff

F. LOGISTICS (STAFF, CONSUMER UNITS, AND COMPOSITE COMBAT SUPPORT COMMAND)

O-F-1 Performs supply operations at consumer unit level
O-F-2 Performs supply staff functions
O-F-3 Performs equipment maintenance and readiness staff functions in a General Staff or other coordinating staff
O-F-4 Performs transportation staff functions in a General Staff or other coordinating staff
O-F-5 Performs logistical services staff functions in a General Staff or other coordinating staff
O-F-6 Performs staff functions pertaining to motor vehicle maintenance and operation
O-F-7 Performs general logistics staff functions in a high-level staff
O-F-8 Performs staff functions concerning procurement of materiel
O-F-10 Reviews, processes and coordinates military construction planning and programming (Major command or departmental level)
O-F-11 Performs high level staffwork in reviewing and coordinating military base and facility requirements
O-F-12 Directs and controls operations of a combat support command or comparable composite combat service support organization

G. COMMUNICATIONS AND ELECTRONICS

O-G-1 Performs special staff and operating functions pertaining to unit communications
O-G-2 Performs special staff functions pertaining to communications-electronics
O-G-3 Directs and controls operations of mobile wire communications support unit
O-G-4 Directs and controls operations of mobile radio communications support unit
O-G-5 Establishes and controls mobile area signal center(s)
O-G-6 Manages communications--electronics facilities and services at major command post or operations center
O-G-7 Directs and controls fixed telecommunications center
O-G-8 Coordinates and/or controls communications-electronic services for military posts and comparable fixed installations

H. CIVIL-MILITARY AFFAIRS

O-H-1 Performs civil-military staff functions in a general staff or other coordinating staff
O-H-2 Plans and coordinates civil affairs unit operations
O-H-3 Plans and coordinates psychological unit operations

I. COMPTROLLERSHIP AND PROGRAM/PROJECT/PRODUCT MANAGEMENT

O-I-1 Performs program and budget staff functions
O-I-2 Performs management analysis staff functions
O-I-3 Conducts cost studies and analyses in financial management of a system, project or program
O-I-4 Performs or assists in overall life-cycle management of special materiel project, product or system
O-I-5 Performs overall programming, evaluation and review (PERT) staffwork in project/product management
O-I-6 Develops and designs budgetary methods and procedures for financial management systems

J. ARMY AVIATION

O-J-1 Performs special staff functions pertaining to Army aviation
O-J-2 Pilots rotary wing aircraft
O-J-3 Pilots fixed wing aircraft
O-J-4 Directs and controls higher echelon maintenance for Army aircraft
O-J-5 Performs Army aviation safety staff functions

K. RESEARCH, DEVELOPMENT, TEST AND EVALUATION

O-K-1 Performs staff functions pertaining to research and development
O-K-2 Conducts service or operational test and evaluation of developmental materiel
O-K-3 Coordinates test and evaluation of developmental materiel
O-K-4(*) Conducts bench-level laboratory research in the physical sciences
O-K-5 Coordinates research, development and testing concerning nuclear weapons effects (non-medical)

O-K-(*) Coordinates or conducts operating-level research, development and engineering for developmental materiel or system (in designated field)

L. OPERATIONS RESEARCH AND SYSTEMS ANALYSIS

O-L-1 Performs operations reserach analysis staff functions

M. ADP MANAGEMENT AND PROGRAMMING

O-M-1 Performs specialized automatic data processing (ADP) staff functions

*Specialty or field also needs to be designated or indicated by code

N. EDUCATION, INSTRUCTION

O-N-1 Prepares and conducts formal instruction
O-N-2 Conducts ROTC activities at civilian education institutions

O. INFORMATION ACTIVITIES

O-O-1 Performs public information staff functions
O-O-2 Coordinates, and prepares materials for, command information or troop information activities
O-O-3 Manages radio station of the Armed Forces Radio and Television Service
O-O-4 Manages television station of the Armed Forces Radio and Television Service

P. AUDIO-VISUAL ACTIVITIES

O-P-1 Performs overall coordination and management of various audio-visual services for a major installation
O-P-2 Produces taped television or motion picture films for instructional or information purposes

U. TACTICAL DIRECTION OF COMBAT UNITS

O-U-1 Directs and controls tactical employment of combat unit (with maneuver elements)
O-U-2 Directs and controls infantry mortars
O-U-3 Directs and controls tactical employment of reconnaissance and scout unit
O-U-4 Directs and controls Redeye type air defense weapons
O-U-5 Directs and controls Infantry antitank weapons

W. MISCELLANEOUS

O-W-1 Provides personal staff assistance to general officer
O-W-2 Directs and leads honor guard or ceremonial unit
O-W-3 Performs staff and coordinating functions pertaining to formal ceremonies
O-W-4 Performs unit liaison activities
O-W-5 Performs formal investigative staff functions
O-W-6 Performs military history staff functions
O-W-7 Provides advice and assistance for Army reserve components
O-W-8 Prepares doctrinal or formal instructional publications
O-W-9 Represents US forces in military standardization activities with other countries
O-W-10 Performs chemical staff functions in a combat or combined arms organization

X. INDIVIDUAL FUNCTIONS AND SPECIAL QUALIFIERS

O-X-1 Participates individually and directly in ground combat
O-X-2 Participates in airborne operations as a parachutist (MOS SQI prefix 7)
O-X-3 Performs specialized nuclear weapons effects analysis (MOS SQI prefix 5)

O-X-4 Performs staff and coordination functions concerning electronic warfare (MOS SQI prefix E)

AA. AIR DEFENSE ARTILLERY

O-AA-1 Directs and controls employment of light air defense artillery weapons
O-AA-2 Directs and controls HAWK type air defense launchers and missiles

BB. FIELD ARTILLERY

O-BB-4 Performs field artillery reconnaissance and survey functions
O-BB-5 Performs field artillery target acquisition functions

CC. MILITARY POLICE, LAW ENFORCEMENT, CRIMINAL INVESTIGATIONS

O-CC-1 Performs provist marshal staff functions for an installation or command
O-CC-2 Controls and participates in military police operation (non-combat)
O-CC-4 Directs and operates a military confinement facility
O-CC-5 Directs, controls, and/or participates in operations of criminal investigation unit, field office or agency
O-CC-6 Directs and operates criminal information center or systsm

EE. ENGINEERING

O-EE-1 Directs and controls engineering operations of a line combat engineer unit (other than headquarters and bridge units)
O-EE-2 Directs and controls portable bridging
O-EE-3 Directs and controls mobile water supply point unit operations
O-EE-4 Directs and employs atomic demolitions
O-EE-5 Performs engineer staff functions on a division corps, army, or comparable staff
O-EE-6 Directs and controls engineering operations of an engineer construction unit
O-EE-7 Directs and controls engineering operations of engineer construction support or heavy equipment unit
O-EE-8 Performs design, planning and monitoring of engineer unit construction projects
O-EE-9 Directs and controls facilities engineering services for an installation
O-EE-10 Prepares terrain study material
O-EE-11 Conducts engineering surveys
O-EE-12 Manages field production or revision of military maps (topographic and photo maps)
O-EE-13 Performs on-site supervision of engineer contract construction
O-EE-14 Coordinates military construction activities in an engineer district
O-EE-15 Provides resident engineer district representation and services at a military installation
O-EE-16 Conducts engineer-oriented strategic studies and analyses
O-EE-17 Plans and engineers construction and maintenance of military pipeline system

FF. LOGISTICAL SERVICE OPERATIONS (SPECIALIZED)

O-FF-1 Manages installation commissary
O-FF-2 Directs and coordinates national cemetery activities
O-FF-3 Manages officers' open mess
O-FF-4 Performs food service and advisor staff functions
O-FF-5 Directs and controls operation of mobile field laundry and bath units
O-FF-6 Directs and controls service unit or activity
O-FF-7 Performs purchasing and contracting functions under the Armed Services Procurement Regulations
O-FF-8 Directs and controls mortuary activities
O-FF-9 Manages materiel supply control for one or more specified commodities within an organization or activity
O-FF-10 Performs staff and operating functions concerning property disposal
O-FF-11 Performs contract administration functions under the Armed Services Procurement Regulations
O-FF-12 Coordinates materiel production and procurement activities for a major project or program
O-FF-13 Oversees contractor-operated government munitions plant
O-FF-14 Conducts explosive ordnance of disposal (EOD) operations
O-FF-15 Performs high level coordinating staffwork concerning explosive ordnance disposal (EOD) matters
O-FF-16 Directs and controls chemical combat service support operations

GG. TRANSPORTATION (OPERATIONS AND SPECIALIZED FUNCTIONS)

O-GG-1 Coordinates military passenger traffic and movement operations
O-GG-2 Performs high-level management and coordination of military cargo shipments to and from overseas
O-GG-3 Coordinates cargo handling operations at military ocean terminal
O-GG-4 Directs or coordinates operations of deployable water terminal operating unit
O-GG-5 Directs and controls operations of amphibious truck unit
O-GG-6 Directs and controls operations of transportation truck unit
O-GG-7 Performs high-level highway traffic engineering staff functions

HH. SUPPLY AND MAINTENANCE SUPPORT OPERATIONS

O-HH-1 Directs parachute maintenance and aerial delivery equipment support
O-HH-2 Directs and controls petroleum supply unit
O-HH-3 Directs and controls supply unit or activity (except petroleum)
O-HH-4 Supervises parachute and aerial delivery equipment supply and maintenance
O-HH-5 Repairs parachute and aerial delivery equipment
O-HH-6 Supervises division heavy drop support
O-HH-7 Supervises packing of personnel parachutes
O-HH-8 Directs and controls repair of equipment from supported units
O-HH-9 Supervises storage and warehouse operations
O-HH-10 Directs and controls specialized support maintenance for artillery missile systems
O-HH-11 Directs and controls machine shop and metal-working

O-HH-12 Directs and controls special ammunition combat service support operations
O-HH-13 Exercises staff supervision and technical control over maintenance unit shop and support operations
O-HH-14 Performs technical staff coordination of parts supply aspects of GS or DS maintenance activities
O-HH-15 Manages parts supply activities (maintenance shop stock or user unit)
O-HH-16 Plans and coordinates parts supply aspects of materiel project/product management
O-HH-17 Directs and controls conventional ammunition supply and storage operations
O-HH-20 Coordinates large-scale bulk POL movement and storage operations overseas

II. FINANCE

O-II-1 Performs finance and accounting functions
O-II-2 Performs financial services staff functions for a deployable command

KK. CRYPTOLOGY, SPECIALIZED SIGNAL INTELLIGENCE AND SECURITY OPERATIONS, AND ELECTRONIC WARFARE

O-KK-1 Directs and conducts signal surveillance, intercept, intelligence and related electronic warfare operations (not in flight)
O-KK-2 Directs and conducts airborne signal intelligence operations (surveillance, intercept, locating, etc.)
O-KK-3 Directs, conducts and/or performs specialized cryptologic functions

TENTATIVE HEADINGS FOR ADDITIONAL OFFICER DUTY MODULES*

g-9 Directs and controls installation, operation and maintenance of fixed telephone-digital switching and subscriber equipment

g-10 Directs and controls installation, operation and maintenance of fixed radio communication systems

aa-3 Directs and controls Nike-Hercules air defense launcher activities

aa-4 Performs battery-level fire control for anti-aircraft missile systems

aa-5 Directs and controls anti-ballistic missile (ABM) unit operations

bb-1 Directs and controls operations of field artillery cannon firing battery

bb-3 Directs and controls tactical employment of field artillery guided missile unit

bb-6 Performs field artillery forward observation functions

*Additive to consolidated list of completed modules, dated 1 October 1974, submitted to DA (ARI) under contract DAHC 19-74-C-0026 (AIR Project 45500).

bb-7 Plans and coordinates field artillery operations and performs fire direction (above battery level) and fire support coordination

cc-3 Controls and participates in military police operations (combat support)

ee-18 Directs and controls construction, operation, rehabilitation and maintenance of public works and utilities

ee-19 Plans, designs and directs construction of highways, roads, streets, and bridges

ee-20 Plans, directs and/or supervises construction, installation and maintenance of electrical power and lighting systems and facilities

APPENDIX B COMPLETED AND CURRENT RESEARCH

DAHC-19-73-C-0004: A TAXONOMIC BASE FOR FUTURE MANAGEMENT INFORMATION AND DECISION SYSTEMS

Abstract:

A job analysis procedure for representing work activities at a level more specific than a MOS and more general than a "task" was developed. The new concept was named "Duty Module." The purpose of this phase of the research was to (a) develop and refine the concept, (b) develop methods and formats for applying the concept to Army jobs, and (c) to provide an evaluation of its feasibility and utility for analyzing Army jobs. Specifically, the current phase evaluated the feasibility of using a set of Duty Modules to adequately represent duty positions of members of an Infantry platoon and of using job content data, expressed in Duty Module format, as a basis for evaluating unit performance.

The basic procedure in developing a Duty Module consisted of examining task inventory and/or job analysis data for a variety of different specialties and grouping together those tasks which appeared to cluster together in a meaningful way, primarily occupational homogeneity. Ideally, each Duty Module should be mutually exclusive not encompassing, overlapping or depending on any other one. They must be specific enough so that they describe the essential, significant and continuing work activities of a position and, at the same time, be general enough so as to apply in common across various positions and occupational specialties.

Thirty-one enlisted and 93 officer Duty Modules were developed, field tested, and revised. Field reactions to using the officer Duty Modules as a way of describing work activity requirements were found to be highly favorable. In addition, techniques for employing Duty Modules to describe both unit capabilities and performance worked well when subjected to a pilot test during actual and field training exercise. It was concluded that Duty Modules show a great deal of promise in describing jobs, setting requirements, and evaluating unit and job performance.

Reports:

Hahn, C. P. and Stephenson, R. W. A taxonomic base for future management information and decision systems: Describing the effectiveness of organizational units. Technical Report AIR-2350-7/72-TR-7. Washington, D.C.: American Institutes for Research. July 1972.

Miller, R. B. A taxonomic base for future management information and decision systems: Theoretical background to the design of duty modules. Technical Report AIR-2650-12/71-TR-4. Washington, D.C.: American Institutes for Research, July 1971.

Miller, R. B. Development of a taxonomy of human performance: Design of a systems task vocabulary. Technical Report No. 11, Washington, D.C.: American Institutes for Research, 1971.

Stephenson, R. W. A taxonomic base for future management information and decision systems: Conferences with personnel policy planning groups. Technical Report AIR-2350-3/71-TR-1. Washington, D.C.: American Institutes for Research, March 1971.

Stephenson, R. W. A taxonomic base for future management information and decision systems: Information requirements of the training subsystem. Technical Report AIR 2350-3/72-TR-5. Washington, D. C.: American Institutes for Research, March 1972.

Stephenson, R. W. & Fleishman, E. A. A taxonomic base for future management information and decision systems: A common language for resource and requirement planning. BESRL Technical Research Note 244, AD-757-794. Washington, D.C.: U.S. Army Behavior and Systems Research Laboratory, October 1972.

Stephenson, R. W., Hahn, C. P., & Davis, W. P. A taxonomic base for future management information and decision systems: Ways of describing the effectiveness of organizational units. Washington, D.C. American Institutes for Research, April 1973.

Stephenson, R. W., Johnson, C. D., Cory, Bertha & Korotkin, A. L. A modular approach to the identification and classification of personnel resources and requirements. Final Technical Report. Washington, D.C. American Institutes for Research, January 1974.

DAHC-19-73-C-0041: DEVELOPMENT OF DUTY MODULES FOR INFANTRY AND QUARTERMASTER

Abstract:

Job analyses were conducted for a variety of positions that Quartermaster officers fill. A total of 89 "job content" modules were then designed based upon the Quartermaster job analyses as well as 100 Infantry officer job analyses conducted previously. It was discovered that the 89 job content modules could account for almost all (a minimum of 80 percent) of the work activities for all 163 officer jobs for which data were available. A determination was then made of the extent to which the job content modules were compatible with activity groupings implicit in the design of several officer courses of instruction. The grouping principles used to organize programs of instruction and the grouping principles used when the job content modules were designed were remarkably similar in many ways, especially in reliance upon function as a grouping principle. The degree of similarity seemed to depend upon the extent to which the course of instruction was occupationally related.

Reports:

Hadley, H. I. The design of a system of job analysis for duty positions that Infantry and Quartermaster officers fill. Washington, D.C. American Institutes for Research, December 1973.

Stephenson, R. W., Hadley, H. I., & Davis, W. P. A Comparison of Officer Job Content Modules with Activity Groupings Implicit in Course Design. Washington, D.C. American Institutes for Research, August 1973.

DAHC-19-73-C-0042: A FIELD SURVEY TO EVALUATE AN EXPERIMENTAL SET OF DUTY MODULES

Abstract:

Field surveys were conducted for the Army to test and evaluate an experimental set of 89 modules as developed by the American Institutes for Research under previous contract DAHC 19-73-C-0041 for representative jobs to which Infantry and Quartermaster officers are assigned. Four modules were added during the surveys, raising the total to 93. Surveys were conducted using officers of three division headquarters, six Infantry battalions, and six Quartermaster companies, plus a variety of supplemental individual surveys as required for test coverage, yielding a total of 518 usable survey returns. The results were analyzed by various means, assisted by automatic data processing and including cluster analysis using the Computerized Occupational Data Analysis Program (CODAP). Card decks for all field data were also delivered to the Army Research Institutes for the Behavioral and Social Sciences for further analysis there as desired. The experimental set of duty modules was found generally to be valid in content, truly modular in terms of successful commonality and standardization, and in consonance with actual officer duties and assignment practices in the field. A few modules, although validly based, were not applied by the particular officers surveyed in the field, some had low test frequencies, and some others showed need for minor refinement. However, most of the modules were validated. Ninety-six percent of the officers surveyed stated that their test modules fitted and reasonable described their duties, and clear majorities responded favorably to a number of other questions testing the modules and officer reactions. The duty modules used in this survey, with the addition of new specialized or "branch material" modules as required, would suffice as a basis for further field surveys and evaluations involving officers of other branches of the Army. The report also includes appendices on duty module design and on the relationship of officer duty modules to unit capabilities.

Reports:

Sitterson, J. D., Jr., & Wintersteen, J. O. Results of the field survey to evaluate an experimental set of officer duty modules. Technical Final Report. Washington, D.C.: American Institutes for Research, January 1974.

Wintersteen, J. O. Grouping of similar positions by officer duty module applications and time (CODAP Analysis). Supplemental Technical Report. Washington, D.C.: American Institutes for Research, February 1974

DAHC 19-74-C-0026: JOB CONTENT MODULES FOR ENGINEER AND ORDNANCE OFFICER POSITIONS

Abstract:

In fulfillment of this technical objective for this project, the American Institues for Research (AIR) developed forty-one (41) additional Duty Modules for use in describing positions held by Engineer officers and Ordnance officers. These new Duty Modules, when used selectively with those developed by AIR in contracts DAHC 19-73-C-0041 and DAHC 19-73-C-0042, fully describe duty positions for Engineer and Ordnance officers in both MTOE and TDA types of organizations. A survey was administered to officers in both types of organizations to validate Duty Module descriptions of their positions. Three different survey methodologies were used in order to determine the most suitable procedure for future surveys. The principal product of this research is the design of 41 additional Duty Modules, bringing the total designed to 174 Duty Modules.

Reports:

Korotkin, A. L. & Davis, W. P. Design and validation of additional duty modules for engineer and ordnance officer positions. Technical Final Report. Washington, D.C.: American Institutes for Research, February 1975.

DAHC-19-75-C-0003: DEVELOPMENT OF CRITERIA DIMENSIONS FOR EVALUATION OF PERFORMANCE AND CAREER DEVELOPMENT OF ENTRY-LEVEL OFFICERS

Abstract:

In fulfillment of the technical objective for this project, the American Institutes for Research (AIR) developed statements of "job performance dimensions" reflecting salient aspects of job performance in entry-level positions across the 30 entry-level specialties of the Army's Officer Personnel Management System (OPMS). In the process job schedules and duty modules developed by AIR in contracts DAHC 19-73-C-0042 and DAHC 19-74-C-0026 were examined and analyzed. A list of entry-level positions was developed. Duty module applications were analyzed; in the process, needs for additional duty modules were identified and tentative headings for some of them were developed. Through processes of analysis, refinement and coordination, as explained in the report, a list of nine "job performance dimensions" was developed. A principal product of this research is a seven-part matrix (Appendix D of the report) showing the relationship of the "job performance dimensions" and pertinent duty modules to entry-level positions, grouped by OPMS specialty.

Report:

Sitterson, J. D., Jr., Davis, W. P. & Korotkin, A. L. Development of criteria dimensions for evaluation of performance and career development of entry-level officers. Final Technical Report. Washington, D.C. American Institutes for Research, November 1974.

EDUCATIONAL PREPARATION FOR THE 47 OPMS SPECIALTIES

Purpose

As part of the overall study of the relationships of Duty Modules to training and experience requirements in career development and selection of alternate specialty, a survey was conducted to determine how individual officers view the educational preparation for the 47 OPMS specialties. Such preliminary data would be useful to the Training and Doctrine Command (TRADOC), the Army Research Institute (ARI), and the American Institutes for Research (AIR) in future considerations of the educational requirements for each of the specialties.

Procedure

A questionnaire was designed and mailed to ten "experts" in each of the 47 OPMS Specialties. (The "experts" were identified for TRADOC by OPD, MILPERCEN.) Unfortunately, due to personnel turnover only 440 of the sample could actually be located. Of these, 307 responses were received--a 70 percent return. The sample was composed of 2 Majors, 427 Lieutenant Colonels, and 11 Colonels.

Results

The major findings of the survey are shown below. The data have been reformulated from the questionnaire to facilitate interpretation. As can be seen in Items 1 through 3 an overwhelming majority of the respondents agree with their MOS, Primary Specialty, and Alternate Specialty designations. In addition, over 86 percent of the respondents felt that the professional education/training described for the Primary Specialty in Pamphlet DA 600-3 was valid.

	Yes	No	No Response or Don't Know
1. Is your primary MOS the appropriate one for you in view of your experience?	87.3%	9.1%	3.6%
2. Do you agree with the Primary Specialty designated for you?	79.2%	16.6%	4.2%

	Yes	No	No Response or Don't Know
3. Do you agree with the Alternate Specialty designated for you?	76.2%	16.0%	7.8%
4. Do you think the professional education/training described in DA Pamphlet 600-3 for your Primary Specialty is valid?	86.3%	7.5%	6.2%

Item 5 demonstrated without question that OJT and experience are considered to be the best sources for the knowledge required for their Primary Specialty. Military schools ran a distant second; civilian schools, both undergraduate and graduate, far below.

5. In ranking the sources of education and training in the order in which each has contributed directly to the basic knowledge required in their Primary Specialty the following results were obtained:

Source	AVE Rank	Percent Respondents assigning rank 1st	2nd	3rd	4th	5th	N/A
OJT and Experience	1.5	60.3	29.5	9.2	1.0		
Military Schooling	2.2	23.6	51.5	12.1	11.5	1.0	.3
Civilian Schooling (Undergrad)	3.4	8.2	4.6	45.2	33.4	2.0	6.6
Other*	3.5	0.3	1.3	4.9	3.3	2.6	87.6
Civilian Schooling (Graduate)	3.6	7.5	13.4	26.6	32.8	3.9	15.7

*Other sources mentioned included personal study, professional seminars and meetings, and civilian training and experience.

With regard to civilian education about one-third of the respondents reported that it was related neither to the current Primary nor Secondary Specialties, although about two-thirds reported that the cost of such education (obtained during active duty) was borne by the U.S. Government. Over 85 percent of the respondents indicated that an undergraduate degree was the minimum civilian education <u>required</u> for the Primary Specialty and about 60 percent of the respondents felt that a Master's Degree was desirable. About one-half of the respondents reported that such civilian education should be pursued on a full-time basis at the Bachelor's or Master's level.

6. Is your civilian education related to your:

Primary Specialty	14.6%
Alternate Specialty	15.6%
Both	36.2%
Neither	33.6%

7. Was the cost of your active duty civilian education paid for entirely or primarily by the U.S. Government?

Yes	64.8%
No	28.7%
N/A or No Response	6.5%

8. What is the minimum civilian education required and desirable for your Primary Specialty?

	Min. Civ. Education REQUIRED		Min. Civ. Education DESIRABLE	
	% of Resp.	Cumulative	% of Resp.	Cumulative
Doctoral Degree	1.0%	1.0%	4.6%	4.6%
Master's Degree	11.3%	12.3%	55.0%	59.6%
Some graduate courses	17.3%	29.6%	16.7%	76.5%
An undergraduate degree	55.7%	85.3%	21.2%	97.7%
Some undergraduate courses	11.4%	96.7%	2.3%	100.0%
None beyond High School	3.3%	100.0%	0.0%	0.0%

9. In pursuing civilian education should it be

	UNDERGRAD	MASTERS	DOCTORATE
a. full time attendance	51.1%	45.9%	17.9%
b. primarily at personal expense	15.6%	21.5%	49.8%

Conclusions

The results of this initial survey reflect some major inconsistencies with regard to the perceived value of civilian education. Recognizing the limitations of the current data additional information from a larger and more representative sample of officers needs to be collected before any general conclusions can be drawn.